### **B63J**

#### **Auxiliaries on vessels**

#### **Definition statement**

This subclass/group covers:
Auxiliaries on vessels

- Arrangements of installations for producing fresh water
- Arrangements of installations for ventilating, heating, cooling, or air#conditioning
- Arrangements of installations for treating ballast water, waste water, sewage, sludge, or refuse
- Arrangements of installations for preventing or minimizing environmental pollution, not otherwise provided for

Driving of auxiliaries

Vessel auxiliaries not otherwise provided for

### Relationship between large subject matter areas

B63J is the general home for special arrangements on vessels of apparatus allowing the intended use of said vessels, insofar as there is no other specific place for such apparatus in another subclass of B63. B63J covers in particular arrangements of apparatus for producing fresh-water, and treating waste#water, for ensuring an appropriate air climate in all habitable areas, cargo spaces and operation areas, and for providing the vessel with energy other than for propulsion purposes.

Whilst <u>B63J 2/00</u> provides for arrangements on vessels of apparatus for ventilation, heating, cooling, or air-conditioning of living spaces, engine rooms, holds or tanks, <u>B63B 25/00</u> provides for load-accommodation arrangements as such, <u>B63B 29/00</u> provides for crew and passenger accommodation as such, <u>B63C 11/00</u> provides for air-supply and heating arrangements for divers, <u>B63G 8/36</u> provides for special adaptations of ventilation, cooling, heating, or air-conditioning for underwater vessel, e.g. submarines, and <u>B63H 21/00</u> provides for arrangements of propulsion power plants or units on vessels.

Whilst <u>B63J 3/00</u> provides for apparatus and arrangements on vessels for providing energy for driving vessel auxiliaries, the subclass <u>B63H</u> provides means for providing or collecting energy for propulsive purposes.

Whilst <u>B63J 4/00</u> provides for arrangements on vessels of installations for treating waste-water, ballast-water, sewage, sludge or refuse, <u>B63B 17/06</u> provides for refuse discharge, e.g. of ash, <u>B63B 29/16</u> provides for soil-water

discharges, and  $\underline{\text{B63H 21/38}}$  provides for methods and apparatus for handling power plant coolants.

# References relevant to classification in this subclass

This subclass/group does not cover:

Arrangements and adaptations of equipment for emptying or ballasting, of refuse and soil water discharges, of air-scoops for port-holes, of mooring, anchoring or towing equipment, of equipment for handling life-boats, of ship-based loading or unloading equipment, of furniture, closets, galleys, of equipment for controlling vessel attitude, of equipment for surf-boards and the like, of safety equipment, of means for stowing frozen goods, of signalling or lighting devices, of nautical instruments or navigational aids, of means for marking navigational route, of means for tank, cargo hold and hull cleaning, of means for hull protection, and of ventilating means for cleaning tanks.	B63B
Equipment, methods and installations for launching, hauling-out, dry-docking or storing on land, for salvaging sunken vessels, for life-saving in water, for dwelling or working under water; Equipment on vessels for transport over land.	<u>B63C</u>
Arrangements of offensive or defensive equipment on vessels; Methods and installations of equipment for laying and sweeping of mines; Equipment and installations for underwater vessels, in particular arrangements for ventilation, heating, cooling or air-conditioning for submarines.	<u>B63G</u>
Arrangements, methods and installations for marine propulsion, steering and dynamic positioning	<u>B63H</u>

Anti-theft devices and arrangements	E05B 73/007
for boats, boat-equipment, or the like, using locks	

Places in relation to which this subclass is residual:

Arrangements of apparatus for rendering vessels, in general, habitable, or for putting them in working order	<u>B63B</u> - <u>B63H</u>
Arrangements on vessels for preventing or minimizing environmental pollution	<u>B63B</u> - <u>B63H</u>

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Centrifugal separators, e. g. for bilge-water	B04
Arrangements or adaptations of heating, cooling, ventilating, or other air-treating devices for passenger and cargo spaces of vehicles in general	<u>B60H</u>
Treatment of water, waste water, sewage or sludge in general	<u>C02F</u>
Processes or apparatus for liquefying or solidifying gases or gaseous mixtures, e.g. with integration with a unit for consuming hydrocarbons as feed stock	F25J 1/00

# Special rules of classification within this subclass

In this subclass, two different Indexing Schemes are used:

The first Indexing Scheme represents a further sub-division of the CPC scheme (breakdown codes). The symbols of this first Indexing Scheme are hierarchically arranged under CPC groups. They are in their scope limited by

the scope of the respective symbols CPC scheme under which they are indented. This first Indexing Scheme is used for invention information and additional information.

The second Indexing Scheme is arranged under the subclass <u>B63B</u>, and covers the range <u>B63B 2201/00</u> to <u>B63B 2241/00</u>. This second Indexing Scheme is used in all subclasses under the class B63 "Ships or other waterborne vessels; Related equipment". This second Indexing Scheme is used for indexing non-trivial information related to the invention information as far as for this information no place is provided for in a particular group in the class B63.

The use of both Indexing Schemes is obligatory for documents published after July 2011. The contents of these groups is not complete before this date.

### **Glossary of terms**

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Air-conditioning	The process of controlling the humidity, ventilation, and air temperature, e.g. in a vehicle.
Air-scoop	An air catching device for passive ventilation of living spaces, cargo holds, engine rooms and the like.
Auxiliaries	Apparatus, equipment or installations assisting in making a ship or other waterborne vessel habitable or putting it in working order.
Bilge	A part of the hull and corresponding compartment of a ship where the hull sides curve inward to meet at the keel.
Bilge-water	Soiled water collecting in the bilge
Port-hole	A typically circular window in the side of a boat or ship.
Sewage	Any liquid-borne waste, e.g. soil-water from closets, or waste-water containing animal or vegetable matter in suspension or solution.

Any kind of water adversely affected in quality by human activities.

## **Synonyms and Keywords**

In patent documents the following expressions/words "sewage" and "waste water" are often used as synonyms.

In patent documents the expression(s)/word(s) "bulls' eye", "side-light" and "side-scuttle" are often used instead of "port-hole" which is used in the classification scheme of this group.

### **B63J 1/00**

Arrangements of installations for producing fresh water, e.g. by evaporation and condensation of sea water [N: (treatment of water in general C02F)]

#### **Definition statement**

This subclass/group covers:

Assemblages or relative dispositions onboard ships or other waterborne vessels of apparatus or installations for producing fresh water, as well as special adaptations of such apparatus or installations, as far as of interest for the onboard arrangement.

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Physical or chemical processes or apparatus in general, e.g. separation by evaporation, distillation, filtration	B01
Centrifugal apparatus or machines for carryingout physical or chemical processes, e.g. separators	B04
Treatment of water, waste water, sewage or sludge in general	<u>C02F</u>

### B63J 2/00

Arrangements of ventilation, heating, cooling, or

# air-conditioning (for submarines B63G8/00; ventilating for cleaning tanks B63B57/04; for vehicles in general B60H)

#### **Definition statement**

This subclass/group covers:

- Assemblages or relative dispositions of apparatus or installations for ventilating, heating, cooling, or air-conditioning inner spaces of ships or other waterborne vessels, as well as special adaptations of such apparatus or installations, as far as of interest for the onboard arrangement. In particular, this main group covers:
- Arrangements of apparatus or installations for ventilating or air-conditioning:
- Arrangements adapted for onboard living spaces

Arrangements adapted for engine rooms

Arrangements adapted for cargo holds

Arrangements of ventilating shafts

Air-scoops.

Arrangements of apparatus or installations for heating or cooling onboard spaces, e.g. comprising means adapted for exploiting waste energy:

Arrangements specially adapted for heating or cooling tanks for liquid cargo.

# References relevant to classification in this group

This subclass/group does not cover:

Air-scoops specially adapted for port-holes	B63B 25/26
Ventilation of tanks or cargo holds of marine vessels for cleaning purposes	B63B 57/04
Ventilation, e.g. by means of schnorkels, cooling, heating, or air-conditioning specially adapted for use on underwater vessels, e.g. submarines; Arrangements thereof	B63G 8/36

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Arrangements or adaptations of heating, cooling, ventilating, or other air-treating devices for passenger and cargo spaces of vehicles in general	<u>B60H</u>
Load-accomodating arrangements, e.g. stowing, trimming, on ships or other waterborne vessels; Vessels characterised thereby	<u>B63B 25/00</u>
Accommodation for crew or passengers on ships or other waterborne vessels	B63B 29/00
Domestic- or space-heating systems, e.g. central heating systems; domestic hot-water supply systems; elements or components therefor (in general)	F24D
Air-conditioning; air-humidificaton; ventilation (in general)	<u>F24F</u>
Production or use of heat not otherwise provided for, e.g. solar heat	<u>F24J</u>
Refrigeration or cooling; combined heating and refrigeration systems; heat pump systems; manufacture or storage of ice; liquefaction or solidification of gases (in general)	<u>F25</u>

# **Glossary of terms**

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Air-conditioning	The process of controlling the humidity, ventilation, and air temperature, e.g. in a vehicle.
Air-scoop	An air catching device for passive ventilation of living spaces, cargo holds, engine rooms and the like.

A typically circular window in the side of a boat or ship.

### B63J 3/00

# Driving of auxiliaries (transmission elements per se F16)

### **Definition statement**

This subclass/group covers:

- Methods or means for driving onboard auxiliaries, e.g. for driving winches, wherein these methods or means are characterized either by the energy source, or by the transmission of energy to the respective auxiliaries. In particular, this main group covers:
- Driving methods or means using the propulsion power plant or prime mover as energy source.

Driving methods or means using energy sources other than the prime mover, e.g. using electric generator sets, or electric shoreside energy sources.

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Auxiliary drives in vehicles in general	B60K 23/00
Tying-up, or shifting, or anchoring of ships or other waterborne vessels; towing, or pushing equipment;	B63B 21/00
Loading or unloading cargo or passengers	B63B 27/00
Driving engine auxiliaries, in general	<u>F02B</u>
Systems acting by means of fluids in general; fluid-pressure actuators, e.g. servomotors; details of fluid-pressure systems, not otherwise provided for	<u>F15B</u>
Transmission elements per se	<u>F16</u>
Circuit arrangements or systems for supplying or distributing electric power; systems for storing electric	<u>H02J</u>

energy (in general)	

## Special rules of classification within this group

In this main group, an Indexing Scheme is arranged under the subgroup B63J 2003/001, in which the type of the power supply, or the type of the power transmission respectively used for driving auxiliaries is indexed, if relevant for the invention. If power supply and power transmission are of different type, then both are indexed with their respective code, provided both are of relevance for the invention.

The use of this Indexing Schemes is obligatory for documents published on or after 1 January 2013. The contents of these groups is not complete before this date.

### B63J 4/00

Arrangements of installations for treating [N: ballast water,] waste water, sewage, [N: sludge, or refuse], or for preventing environmental pollution not otherwise provided for; ([N: centrifugal bilge-water separators B04; discharge of refuse, e.g. for ash B63B17/06; arrangements on tanks for fuel or the like for minimizing pollution by accidents B63B17/0036, associated with cargo tanks B63B25/082; vessels for collecting pollution from open water B63B35/30;] soil-water discharges B63B29/16; [N: treating waste water, sewage, or sludge, in general, C02F; cleaning or keeping clear the surface of open water, in general E02B15/00])

#### **Definition statement**

This subclass/group covers:

Assemblages or relative dispositions of apparatus or installations on ships or other waterborne vessels for treating ballast or waste water, sewage, sludge, or refuse, as well as special adaptations of such apparatus or installations, as far as of interest for the onboard arrangement, e.g. arrangements of installations or devices adapted for on board ballast water treatment before or at discharge, such as biocidal treatment.

 Onboard assemblages or relative dispositions of apparatus or installations for preventing environmental pollution, not otherwise provided for, as well as special adaptations of such apparatus or installations, as far as of interest for the onboard arrangement, e.g. preventing environmental pollution using dust separation during loading.

# References relevant to classification in this group

This subclass/group does not cover:

Arrangements or adaptations on tanks for fluid fuel for minimizing environmental pollution by accidents	B63B 17/0036
Hatchway tents, e.g. for weather protection of cargo during loading or unloading	B63B 17/023
Arrangements or adaptations on tanks for fluid cargo for minimizing environmental pollution by accidents	B63B 25/082

# **Informative references**

Attention is drawn to the following places, which may be of interest for search:

Centrifugal separators, e. g. for bilge-water	B04
Arrangements or adaptations of sanitation devices in vehicles in general	B60R 15/00
Conduits for emptying or ballasting;	<u>B63B 11/00</u>
Refuse discharge specially adapted for marine vessels, e.g. of ash	B63B 17/06
Vessels specially adapted for collecting pollution from open water	B63B 35/35
Treatment of water, waste water, sewage or sludge in general	<u>C02F</u>
Cleaning or keeping clear the surface of open water; Apparatus therefor (in general)	E02B 15/00

# **Glossary of terms**

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

An event which is sudden, unvolutary, and harmful.

### B63J 99/00

## Subject matter not provided for in other groups of this group

#### **Definition statement**

This subclass/group covers:

- Onboard means, equipment or installations assisting in making a ship
  or waterborne vessel habitable or putting it in working order, other than
  arrangements of installations for treatment of water, sludge or refuse,
  for preventing environmental pollution, or for air-conditioning in its
  broadest sense, and other than means for driving onboard auxiliaries.
- In particular, this main group covers:
- Burning of transported goods, e.g. cargo oil or fuel, boil-off gas, or refuse, e.g. for propulsive purposes

Use of computers for particular ship-related tasks, e.g. for evaluating state variables, not otherwise provided for

# Relationship between large subject matter areas

B63J 99/00 is the residual place in this class for auxiliaries on vessels.

# References relevant to classification in this group

This subclass/group does not cover:

Apparatus for indicating vessel attitude, e.g. for indicating draught, load, inclination or duration of roll for hull protection, and of ventilating means for cleaning tanks.	B63B 39/00
Diving computers	B63C 11/02

Places in relation to which this main group is residual:

Arrangements or apparatus for	<u>B63B</u> - <u>B63J</u>
	11

rendering vessels, in general, habitable, or for putting them in working order	

# **Informative references**

Attention is drawn to the following places, which may be of interest for search:

Incinerators or other apparatus for consuming industrial waste, e.g. chemicals	F23G 7/00
Digital computing or data processing equipment or methods, specially adapted for specific functions, or for specific applications	<u>G06F 17/00</u> - 19/00